Tactics, Techniques and Procedures (TTP) for Archiving Files

Purpose: To provide a common guide for archiving files from the Storage Area Network (SAN) to the appropriate media.

Scope: The collection of data produced all the personnel in the Garrison on an annual basis is significant, both in the production of, but also the storage of the data. Data has a little realized, yet real cost to storage, maintenance, backups and retrieval. Excluding regulatory requirements that specify mandatory data retention timelines, such as the Army Records and Information Management System (ARIMS) and others, this TTP is to assist those archiving or moving data from computer systems or the Storage Area Network (SAN) for permanent storage. A storage discipline needs to be realized to maintain cost effectiveness. Several different scenarios will be addressed to cover most issues. Common sense should drive issues not addressed.

If the data is:	Action taken:
Never used:	Delete it
Never used, but must be kept for xx years:	Copy to CD/DVD, file media IAW ARIMS, remove from SAN.
Occasionally used, but must be kept for xx years:	Maintain working files on SAN for 3 years, then move to CD/DVD and file IAW ARIMS, remove from SAN
Rarely used or used by one or two people:	Copy to their local computer, maintain copy on CD or DVD
Rarely used by a group of people:	Make a master copy on CD/DVD, remove from SAN, install copies on local computer, and file the CD/DVD in cabinet. Users can copy from CD/DVD as needed.
Only used by one person:	Remove from SAN, local copy on user computer
Routinely used by a group of people:	Maintain data on SAN, ensure duplicate copies or old revisions are removed. Organize the data and develop discipline to maintain data structure.
An OUTLOOK .PST file:	Move the .PST from the SAN to the user computer and develop personal backup strategy.
Executable programs:	Users are not allowed to install programs. Make sure commercial software disks are available and delete the copy from SAN.
Personal pictures, video or music:	Allow user to copy to CD/DVD or local computer and remove from SAN
DVD movies that are copied to SAN, i.e., .VOB files:	Delete. .VOB files originated on a movie disk. Find the disk. Delete from SAN.
Copies of FM's, Regulations and Policies:	These documents are routinely updated. Maintain web links to source documents. Users can download them to their local computer as needed. Delete from SAN.

How to copy files from the SAN to CD/DVDs

Understandings:

1. **CD or DVD discs?** The main difference between CD and DVD discs is the amount of storage each disc can hold. A **C**ompact **D**isc (CD) can hold up to 700 Megabytes (MB) of data. A **D**igital **V**ersatile **D**isc (DVD) can hold up to 4.6 GB of data or roughly 6.5 times a CD can. For this document the term CD/DVD can be used interchangeably.

2. **Use only CD-R or DVD-R discs.** These are "use-once" discs. Do not use CD-RW or DVD-RW or "re-writable" discs as these create other problems. CD/DVD Discs that have a white write-on surface or "Inkjet Printable Disc" are preferred.

3. **What to use:** Always use Roxio Creator to burn CD/DVDs. Instructions on how to use Roxio Creator are below. Do not use the CD burning capabilities built into Windows 7. Using the "drag and drop" feature is a Windows 7 feature and should not be used. Windows 7 provides choices that confuse most users and selecting the wrong choice or ejecting at the wrong time will cause data to be lost. Additionally, Windows 7 burns in "sessions". Once a session is closed, the data may not be retrievable from the disc on another computer. Only experienced users should use this feature and should verify that all files can be read on another computer before deleting the original source files.

4. **Where are the files?** Do not "burn" the data directly from the SAN. Copy the files or folders to the computer, organize the data logically and "burn" the disks from the computer. Only after you have verified that the data is on the disk do you delete any copies for the data from the SAN. It is best to check it on another computer.

5. **Marking**. Mark the top of the CD/DVD indicating what is on the disk, not the sleeve it is stored into. Additionally all disks must be marked with their classification, either "Unclassified" or "FOUO" as appropriate. Printing a listing of the files and placing it inside the CD/DVD jacket also works well.

6. **Storing**. Store the data where it makes sense. Check ARIMS storage requirements for your data. It's just like storing paper documents, but instead you have one or two disks instead of folders of paper. Make sure the people that need the data know where it is stored.

7. **Delete the original documents from the SAN.** Delete the source data from the SAN only after you have verified that the documents you thought was transferred to a disk are actually on the disk.

8. **Clean up**. Shred or break any disks that did not burn correctly. If you cannot break or shred the disc, put it in your FOUO waste. Remember that some files may still be readable and we don't want them in the landfill to be picked up.

How to Use Roxio Creator:

Put a blank CD or DVD disc in your CD drive.

Click your Menu button, then **All Programs**, then **Roxio Creator,** and then **Home.** Roxio will open and in the left menu click **Data and Backup** and then **Data Disk.**

Click the ADD DATA button; select either ADD FILES or ADD FOLDER. In the next box, find and select the files or folders you wish to copy.
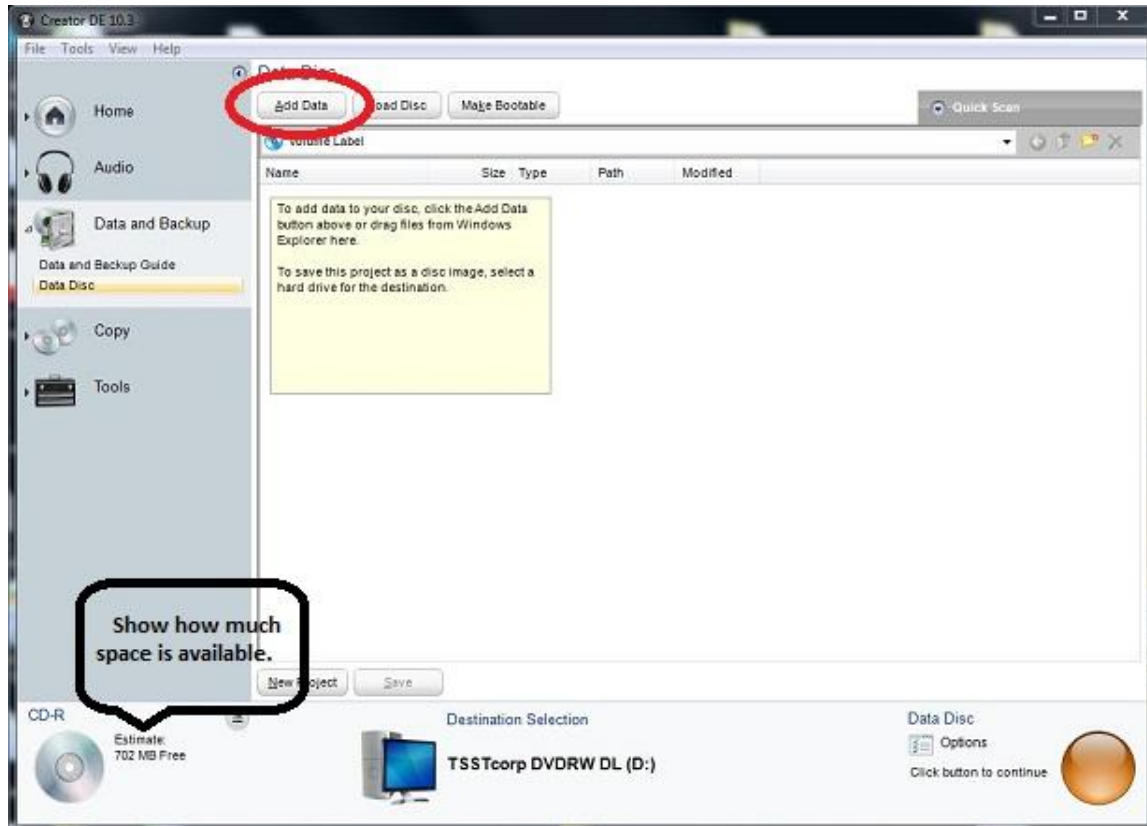

Figure 1

As you select files, it will indicate how much space remains on the disk. It will not let you select more files than the disk can hold.
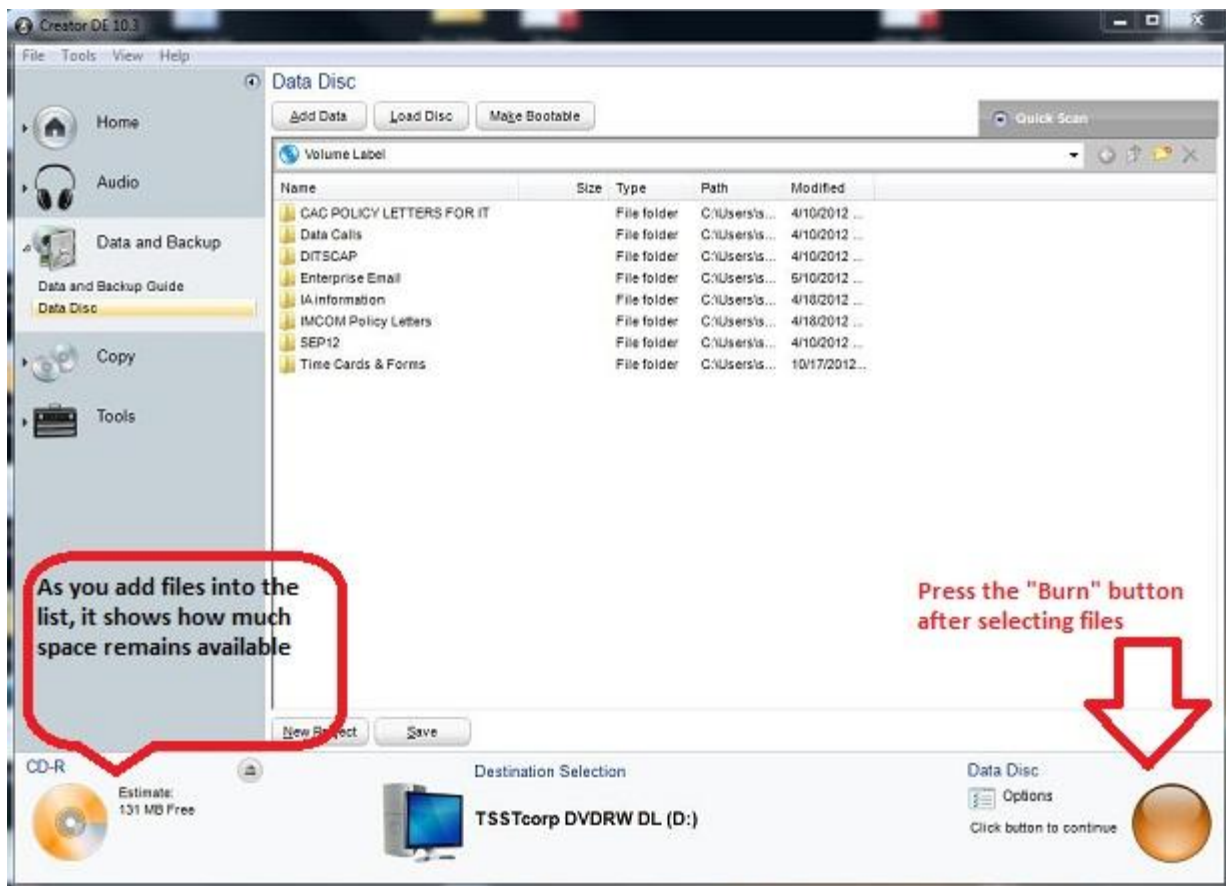
Figure 2

After selecting all files to be copied to the disk, press the "Burn" button. As the files copy to the CD it will show the progress as it is accomplished.

Once the copy is complete and has been finalized, Roxio will eject the disk and you can either close Roxio or continue using it by replacing the CD/DVD and closing the drive tray.

Remember to label the disk you just burned as either "Unclassified" or "FOUO" and indicate the contents on the disk.